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Relational Ethics Scale: Psychometric evaluation of the Slovene-language version

Abstract: This study aimed to translate, adapt, and psychometrically evaluate the Relational Ethics Scale in the Slovene language. This inventory was developed to measure people’s perception of relational ethics in their families of origin and in current significant adult relationships. Relational ethics is understood in terms of contextual family therapy and is composed of perceptions of trust and justice, loyalty and entitlement. The Slovene version of the Relational Ethics Scale was administered to a sample of 271 Slovene-speaking adults. Exploratory factor (principal component), combined with parallel analysis, found a two-factor structure. This two-factor solution supports theoretically meaningful horizontal and vertical relationships dimensions or subscales. Reliability analysis shows excellent inter-item consistency (Cronbach alpha) coefficients for both subscales, as well as for the total scale. Confirmatory factor analysis supports a two-factor solution. The results support the further use of the scale as a valid and reliable instrument for measuring relational ethics in a Slovene language environment.

Keywords: The Relational Ethics Scale, relational ethics, psychometric evaluation, Slovene-language version

Povzetek: Cilj te raziskave je bil prevesti, prirediti in psihometrično ovrednotiti Lestvico odnosne etike (Si-RES) v slovenščini. Ta lestvica je bila razvita z namenom meriti posameznikovo zaznavanje odnosne etike v njegovi izvorni družini in v trenutnih prominih odraslih odnosih. Odnosno etiko se razume v termih kontekstualne družinske terapije in jo sestavlja zaznavanje zaupanja in pravičnosti, lojalnosti in upravičenosti. Slovenska verzija Lestvice relacijske etike je bila preverjena na vzorcu 271 slovensko govorčih odraslih. Eksplor-

**Ključne besede:** lestvica relacijske etike, relacijska etika, psihometrična evalvacija, slovenska različica vprašalnika

### 1. Introduction

Talk of ethics always involves relationality. Even Aristotle, the father of ethics, emphasised that the goal of ethics is a virtuous life in just relations with others. Man is a relational being and can only realise himself as a human being through relationships. The individual becomes a good person within a supportive environment in which ethical values prevail. The environment, therefore, has an important influence on the ethical development of the individual person.

In contrast, the character of individuals is crucial in shaping the climate within a particular community. We see that there is reciprocity between an ethical personality and a just society. We can say that the goal of ethics is »to lead a good life with and for others in a just order« (Trontelj 2014, 28). Ethics can be defined as a systematic reflection on what is good for the individual, society, and the natural environment.

Relational ethics is concerned with ethical actions explicitly in relationships and responds to the question of how we should live together (Austin 2008, 748). The right ethical response in relationships is complex, sometimes difficult, discovered rather in dialogue with other/s, suitable, balanced, and harmonious, also considering the immediacy and complexity of the particular situation and our moral responsibility within it (748).

Relational ethics is also one of the key constructs in contextual family therapy (Boszormenyi-Nagy, Grunebaum, and Ulrich 1991). In contextual family therapy, relational ethics refer to questions of fairness and mutual reciprocity, trust, and loyalty in relationships (Boszormenyi-Nagy and Krasner 1986, xii). Relational ethics has been seen as the most important dimension of intimate relationships, the primary reason for dysfunction in family and partner relationships, one of the most significant determinants of our actions in intimate relationships, and also of the most essential factors in healing dysfunctional relationships in therapy (Ducommun-Nagy 2009, 33; Boszormenyi-Nagy and Krasner 1986, 271; Hargrave,
Jennings, and Anderson 1991, 146). When there is an imbalance, injustice, or unfairness of the give-and-take dynamic in a relationship over time, dysfunctions often occur (Hargrave, Jennings, and Anderson 1991, 146). Boszormenyi-Nagy, the founder of contextual family therapy, was able to demonstrate that we all have an innate sense about fairness in giving and receiving in relationships; even people in psychosis do not lose this basic understanding of fairness. Our innate capacity for fairness and reciprocity could also lead us to build our moral systems (Ducommun-Nagy 2009, 33–35). The basic sense of fairness could also be found in some animals; Brosnan and de Waal (2003, 297–99) famously demonstrated that monkeys responded with high distress when confronted with unfair treatment.

Relational ethics in contextual therapy is constructed as being of two types. Vertical relational ethics refers to questions of justice, trust, loyalty, and entitlement in hierarchically unequal relationships, such as the relationships between parent and child (Hargrave, Jennings, and Anderson 1991, 146), which are considered asymmetrical and are governed more by care. Horizontal relational ethics refers to these questions in hierarchically equal relationships, such as intimate partners or friends, and are considered symmetrical (147).

Some empirical studies support the correlations of relational ethics with important life variables, such as marital satisfaction, health problems, and depression (Grames et al. 2008; Hargrave and Bomba 1993; Gangamma, Bartle-Haring, and Glebova 2012; Gangamma et al. 2015). Questions of relational ethics and fairness are very important for different interpersonal dynamics; for example, they are essentially connected with the process of forgiveness and respect (Karremans and Van Lange 2005, 290–97; Cvetek and Cvetek 2018, 863; Ducommun-Nagy 2009, 44–46). However, Intimate partners in relationship crises often sink into the dynamic of emphasising their own suffering and the other’s poor and unfair treatment (Shaw 2011, 2), with a spiralling of unfair treatment to each other, driven by the sense of previous unfair treatment from the other partner toward them.

Given that the perception or feeling of justice/injustice is a significant factor in the quality of partner and marital relationships and also possible excuses for hurtful (or even evil) acts toward the other partner, one of the major questions regarding relational ethics in intimate relationships is the subjective nature of the sense of fairness. There are, of course, cases in which partners do not perceive unfair or even violent treatment toward them. Such partners really need support, but individuals are generally inclined to see themselves as more positive, and their investment and giving as more important. The phenomena of blindness (even inattention blindness) and selective attention are well documented in the numerous studies and literature in psychology (Simons and Chabris 1999, 1059–74; Hannon and Richards 2010, 309–19; Hughes-Hallett et al. 2015, 3184–89; Remington, Cartwright-Finch, and Lavie 2014, 1–11; Oktay and Čangöz 2018, 59–66; Chabris et al. 2011, 150–53; Cosman and Vecera 2012, 576). Also, the constructs of
self-affirmation (Steele 1988), self-justification (Holland, Meertens, and Van Vugt 2002; Blanton et al. 2009) and self-deception (Firestone and Catlett 2009, 155) can help us understand the subjective perception of relational ethics. After all, the self-positivity bias, which means that people tend to view themselves in an unrealistically positive light and as having less negative and more positive personality traits and behavioural characteristics than others (Fields et al. 2019, 614), is seen as one of the most common and robust findings in social psychology (Lin, Lin, and Raghubir 2003, 3). With regards to relational ethics, it surely has significant family therapeutic implications. Emotions, emotional regulation, and past aversive experiences (abuse, deprivation, violence etc.) can also play important roles (Gostečnik et al. 2019, 176–78; Cvetek 2012, 281–84; Valenta, Gostečnik, Pate, and Repič Slavič 2019, 19–23; Poljak Lukek and Valenta 2020, 162–64). It is important to stress that Boszormenyi-Nagy understood the goal of therapeutic work with relational ethics not as a cognitive consensus between partners but as one that concerns the dialectic of responsible caring within the relational dialogue, an interpersonal balance of fairness involving the subjectivity of two sides, each being anchored in the polarity of the respective self-interest of the two partners (Boszormenyi-Nagy 1997, 171). Therapeutic attention to the sense of relational ethics itself can be very helpful. For example, an interesting new model (i.e., the 80%–80% model) for more fulfilling intimate relationships was recently developed by Klemp and Klemp (2021). They suggest that instead of a 50–50 (50% investment of one partner and 50% investment of the other partner) model of marriage and relationships based on fairness, one in which each partner is expected to contribute equally to marriage, couples (but not all) should follow an 80–80 model – a shift from a mindset of fairness to one of radical generosity, which can help many relationships to work for the long term (Klemp and Klemp 2021, 18).

Question of fairness and relational ethics seems to be important questions for future research in intimate relationships, so the measure for assessing relational ethics for Slovene cultural contexts is of great interest. The Relational Ethics Scale (Hargrave, Jennings, and Anderson 1991) is currently the only validated and most widely used scale to assess relational ethics, conceptualised as consistent with the theory of contextual family therapy (Rived-Ocaña et al. 2020, 348).

2. Method

2.1 Participants

The sample for the study consisted of 271 volunteering participants, 196 women and 75 men, with a mean age of 37.4 years and a standard deviation of 12.68, ranging from 18 to 80 years. All participants were residents of Slovenia who were proficient in the Slovene language.

Regarding marital status, roughly two-thirds of the sample reported being married (N=158, 58.1%), 51 (18.8%) participants were single, 45 (16.5%) participants
were in partnership but not married, 7 (2.5%) were engaged, 3 (1.1%) were divorced, and 5 (1.8%) were widowed.

Most participants (130, 48%) reported having a university degree, second Bologna degree, or equivalent, 72 (26.6%) had a first Bologna degree or equivalent, 46 (17%) had completed secondary school, 16 (5.9%) had a specialisation or master of science degree, and 7 (2.6%) had doctorates.

2.2 Measures

The Relational Ethics Scale (RES) (Hargrave, Jennings, and Anderson 1991) was used in the study. The RES is a self-report questionnaire, originally consisting of 24 items and measures perceptions of relational ethics in one’s family of origin and current adult significant relationships. The concept of relational ethics measured by RES is understood in terms of contextual family therapy. Participants answer each item on a five-point Likert-type response scale from ‘strongly disagree’ to ‘strongly agree’. It measures two main dimensions (vertical and horizontal, 12 items each); in the original version (component analysis, N=209), each dimension assesses three subscales (trust and justice, entitlement and loyalty) (Hargrave, Jennings, and Anderson 1991, 149–53). The vertical dimension assesses relational ethics in the parent-child relationship of the family of origin, while the horizontal dimension assesses relational ethics in a relationship with a partner. The validity of RES was also tested on single, never-married individuals (N=160, Hargrave and Bomba 1993); principal component analysis found a similar three-factor structure for the horizontal and vertical dimensions.

We have found one adaptation of the scale into a different language. Rived-Ocaña et al. (2020) adapted RES into Spanish. Exploratory factor analysis of the Spanish version resulted in a three-factor solution (59.10% variance explained), one factor composed of Horizontal Relationship items, and two factors composed of Vertical Relationship items (2020, 350–51). Because both factors of the Vertical relationship items were highly correlated, they combined both factors into one to obtain a more theoretically meaningful model. The solution was confirmed with confirmatory factor analysis (351–352). Their results suggest that S-RES is best represented with two subscales representing vertical and horizontal relationships (352).

2.3 Translation Process

The translation process into the Slovene language mainly followed the standard translation process. The approval from the original author of the RES was obtained to translate and adapt the scale to the Slovene language. The English version of the RES was independently translated into the Slovene language by three translators proficient in both English and Slovene. Three versions were compared by the translators, and inconsistencies in their translations were discussed. The consensus was reached for all items. This version was pretested; it was used and analysed by students in a postgraduate course in research methods in marital and family studies at the University of Ljubljana. Students voluntarily administered it
for testing through their social networks to 36 participants (ages ranging from 23 to 54). The data were used to show some basic psychometric analyses based on the collected data and to evaluate the understanding, comprehensibility, and suitability of the items. The scale was also checked by a Slovene language proof-reader. Based upon feedback, some minor aspects of the translated version were discussed by translators and researchers and were modified to best ensure that the questionnaire was well adapted for use within a Slovene cultural context. Then a native English-speaking translator, who had not seen the original English version, translated the Slovene version of the RES back into the English language (back-translation). Translators and researchers compared the original version and the back-translated version about the similarity in language and meaning, ad no important differences were found. The main author of the original version of RES, Terry Hargrave, checked the original and back-translated versions and confirmed the appropriateness of the final version of the translation. The translated version can be found in the Appendix.

2.4 Procedure

Once translated, the RES and a short demographic questionnaire were administered to volunteer participants recruited online through social networks by the authors via the »1ka« online survey tool. The online data collecting method has been criticised by some researchers, but there is strong empirical evidence suggesting that results from these data are consistent with findings from traditional methods (Gosling et al. 2004, 93). The results were analysed using SPSS (version 20) and AMOS (version 27).

3. Results

3.1 Descriptive Statistics on Item Level

Means, standard deviations, kurtosis and skewness on the item level of the translated original RES are presented in Table 1. Means of the items ranged from 1.47 to 4.33, kurtosis from -1.06 to 1.79 and skewness from -1.34 to 1.28.

<table>
<thead>
<tr>
<th>RES Item</th>
<th>M</th>
<th>Md</th>
<th>SD</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3.92</td>
<td>4</td>
<td>1.044</td>
<td>-0.942</td>
<td>0.413</td>
</tr>
<tr>
<td>2</td>
<td>2.62</td>
<td>2</td>
<td>1.202</td>
<td>0.302</td>
<td>-0.921</td>
</tr>
<tr>
<td>3</td>
<td>2.30</td>
<td>2</td>
<td>1.117</td>
<td>0.546</td>
<td>-0.622</td>
</tr>
<tr>
<td>4</td>
<td>3.79</td>
<td>4</td>
<td>1.062</td>
<td>-0.682</td>
<td>-0.327</td>
</tr>
<tr>
<td>5</td>
<td>4.19</td>
<td>4</td>
<td>.812</td>
<td>-0.954</td>
<td>1.055</td>
</tr>
<tr>
<td>6</td>
<td>2.38</td>
<td>2</td>
<td>1.297</td>
<td>0.482</td>
<td>-1.060</td>
</tr>
<tr>
<td>7</td>
<td>3.57</td>
<td>4</td>
<td>1.095</td>
<td>-0.377</td>
<td>-0.906</td>
</tr>
<tr>
<td>8</td>
<td>2.20</td>
<td>2</td>
<td>1.227</td>
<td>0.719</td>
<td>-0.626</td>
</tr>
<tr>
<td>9</td>
<td>2.88</td>
<td>3</td>
<td>1.170</td>
<td>0.071</td>
<td>-0.962</td>
</tr>
<tr>
<td>10</td>
<td>3.78</td>
<td>4</td>
<td>.961</td>
<td>-0.735</td>
<td>0.275</td>
</tr>
</tbody>
</table>
Table 1: Descriptive statistics on item level for the RES.

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>SD</th>
<th>Skewness</th>
<th>Kurtosis</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>3.93</td>
<td>4</td>
<td>.900</td>
<td>-0.776</td>
<td>0.436</td>
</tr>
<tr>
<td>12</td>
<td>2.45</td>
<td>2</td>
<td>1.260</td>
<td>0.541</td>
<td>-0.812</td>
</tr>
<tr>
<td>13</td>
<td>4.09</td>
<td>4</td>
<td>.808</td>
<td>-0.981</td>
<td>1.188</td>
</tr>
<tr>
<td>14</td>
<td>1.78</td>
<td>2</td>
<td>.849</td>
<td>1.148</td>
<td>1.136</td>
</tr>
<tr>
<td>15</td>
<td>2.60</td>
<td>2</td>
<td>1.053</td>
<td>0.228</td>
<td>-0.795</td>
</tr>
<tr>
<td>16</td>
<td>4.33</td>
<td>5</td>
<td>.838</td>
<td>-1.344</td>
<td>1.785</td>
</tr>
<tr>
<td>17</td>
<td>4.22</td>
<td>4</td>
<td>.850</td>
<td>-1.232</td>
<td>1.609</td>
</tr>
<tr>
<td>18</td>
<td>2.37</td>
<td>2</td>
<td>1.062</td>
<td>0.608</td>
<td>-0.320</td>
</tr>
<tr>
<td>19</td>
<td>2.32</td>
<td>2</td>
<td>1.094</td>
<td>0.531</td>
<td>-0.605</td>
</tr>
<tr>
<td>20</td>
<td>4.16</td>
<td>4</td>
<td>.826</td>
<td>-0.825</td>
<td>0.224</td>
</tr>
<tr>
<td>21</td>
<td>3.84</td>
<td>4</td>
<td>.907</td>
<td>-0.530</td>
<td>-0.279</td>
</tr>
<tr>
<td>22</td>
<td>1.47</td>
<td>1</td>
<td>.644</td>
<td>1.283</td>
<td>1.587</td>
</tr>
<tr>
<td>23</td>
<td>1.80</td>
<td>2</td>
<td>.856</td>
<td>1.161</td>
<td>1.352</td>
</tr>
<tr>
<td>24</td>
<td>4.25</td>
<td>4</td>
<td>.797</td>
<td>-1.142</td>
<td>1.499</td>
</tr>
</tbody>
</table>


3.2 Exploratory Factor Analysis

An exploratory factor analysis with principal component analyses was calculated. First, we checked the Kaiser Meyer-Olkin Measure of Sampling Adequacy, and the results showed that the sample was adequate (KMO=0.887). We also performed Bartlett’s test of sphericity, and the test was significant ($\chi^2$ (276) = 2594.65, sig. = 0.000), indicating that nonzero correlations exist within the data set. Based on these good results, we proceed with calculating factor analysis. Oblique rotation (direct oblimin, also used by Rived-Ocaña et al. 2020) was used due to the theoretical assumption that RES factors are correlated.

We first performed analysis using a statistical extraction rule for the eigenvalue to be at least 1 (Kaiser Guttman criterion). The results showed that four factors should be retained, with 56.15% of variance explained. Since Kaiser Guttman criterion is described in the literature as somehow problematic (Hayton, Allen, and Scarpello 2004, 193), proposed parallel analysis (PA) (Hayton, Allen, and Scarpello 2004) with O’Connor (2000) tutorial for SPSS was used to determine the number of factors to retain. PA results showed that three factors should be retained.

In the next step, item communalities and loadings in the pattern matrix were assessed. Similar as in the procedure of the Spanish adaptation of RES by Rived-Ocaña (2020), some items (in our version items 5, 10 and 13) were removed due to low (under 0.30) communalities (communalities of removed items ranged from 0.239 to 0.281). Item 5 (»No matter what happened, I always stood by my family«) was from the original RES Vertical Loyalty subscale, item 10 (»Individuals in my family were willing to give of themselves to benefit the family«) was from the original RES Vertical trust and justice subscale, and item 13 (»I try to meet the emotional needs of this person«) was from the original RES subscale entitled »Horizontal loyalty«. Next (the same as in Spanish adaptation of RES), item 15 (»When I feel hurt, I say or do hurtful things to this person«) and item 19 (»When
I feel angry, I tend to take it out on this person«) from the original Horizontal entitlement subscale of RES were the only two indicators for a single factor and were removed, since the factor does not meet the criterion of at least three indicators (Hair et al. 2010).

Then updated exploratory factor analysis (with a second parallel analysis for determining the number of factors) was calculated. Parallel analysis showed that the two-factor solution should be applied. Updated and final exploratory factor analysis showed a two-factor solution accounting for 50.68% of the variance, factor 1 (indicating horizontal relationship items) explains 33.93% of the variance and factor 2 (indicating vertical relationship items) explains 16.75% of the variance. In Table 3, factor loadings and communalities are presented.

<table>
<thead>
<tr>
<th>RES/Si-RES items</th>
<th>Factor 1</th>
<th>Factor 2</th>
<th>Communalities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item 1 RES / (Item 1 Si-RES)</td>
<td><strong>0.728</strong></td>
<td>0.031</td>
<td><strong>.517</strong></td>
</tr>
<tr>
<td>Item 2 RES / (Item 2 Si-RES)</td>
<td>-0.616</td>
<td>-0.024</td>
<td><strong>.371</strong></td>
</tr>
<tr>
<td>Item 3 RES / (Item 3 Si-RES)</td>
<td>-0.547</td>
<td>0.066</td>
<td><strong>.327</strong></td>
</tr>
<tr>
<td>Item 4 RES / (Item 4 Si-RES)</td>
<td><strong>0.764</strong></td>
<td>-0.092</td>
<td><strong>.637</strong></td>
</tr>
<tr>
<td>Item 6 RES / (Item 5 Si-RES)</td>
<td>-0.733</td>
<td>-0.023</td>
<td><strong>.526</strong></td>
</tr>
<tr>
<td>Item 7 RES / (Item 6 Si-RES)</td>
<td><strong>0.797</strong></td>
<td>0.012</td>
<td><strong>.629</strong></td>
</tr>
<tr>
<td>Item 8 RES / (Item 7 Si-RES)</td>
<td>-0.791</td>
<td>-0.04</td>
<td><strong>.607</strong></td>
</tr>
<tr>
<td>Item 9 RES / (Item 8 Si-RES)</td>
<td>-0.679</td>
<td>-0.059</td>
<td><strong>.438</strong></td>
</tr>
<tr>
<td>Item 11 RES / (Item 9 Si-RES)</td>
<td><strong>0.566</strong></td>
<td>-0.059</td>
<td><strong>.345</strong></td>
</tr>
<tr>
<td>Item 12 RES / (Item 10 Si-RES)</td>
<td>-0.82</td>
<td>0.016</td>
<td><strong>.681</strong></td>
</tr>
<tr>
<td>Item 14 RES / (Item 11 Si-RES)</td>
<td>0.037</td>
<td><strong>-0.708</strong></td>
<td><strong>.520</strong></td>
</tr>
<tr>
<td>Item 16 RES / (Item 12 Si-RES)</td>
<td>0.073</td>
<td><strong>0.804</strong></td>
<td><strong>.613</strong></td>
</tr>
<tr>
<td>Item 17 RES / (Item 13 Si-RES)</td>
<td>-0.026</td>
<td><strong>0.571</strong></td>
<td><strong>.337</strong></td>
</tr>
<tr>
<td>Item 18 RES / (Item 14 Si-RES)</td>
<td>0.001</td>
<td><strong>-0.644</strong></td>
<td><strong>.415</strong></td>
</tr>
<tr>
<td>Item 20 RES / (Item 15 Si-RES)</td>
<td>-0.063</td>
<td><strong>0.762</strong></td>
<td><strong>.616</strong></td>
</tr>
<tr>
<td>Item 21 RES / (Item 16 Si-RES)</td>
<td>-0.037</td>
<td><strong>0.712</strong></td>
<td><strong>.526</strong></td>
</tr>
<tr>
<td>Item 22 RES / (Item 17 Si-RES)</td>
<td>-0.046</td>
<td><strong>-0.53</strong></td>
<td><strong>.268</strong></td>
</tr>
<tr>
<td>Item 23 RES / (Item 18 Si-RES)</td>
<td>-0.022</td>
<td><strong>-0.785</strong></td>
<td><strong>.605</strong></td>
</tr>
<tr>
<td>Item 24 RES / (Item 19 Si-RES)</td>
<td>-0.03</td>
<td><strong>0.797</strong></td>
<td><strong>.651</strong></td>
</tr>
</tbody>
</table>

Note: RES – original Relational Ethics Scale, Si-RES – Slovene version of Relational Ethics Scale. Factor loadings 0.50 or higher are indicated in bold.

Table 2: Principal axis factor analysis results for SI-RES: Oblique (direct oblimin) factor loadings for two factors solution.

The loadings of the Si-RES items ranged between -0.82 and 0.804 (absolute value range between 0.53 and 0.82. There were no significant secondary loadings that would exceed 0.10. The absolute loadings for Horizontal subscale factor items ranged from 0.566 to 0.82, and for Vertical subscale factor items from 0.53 to 0.804.

Similar to the analytic method of Rived-Ocaña et al. (2020), after the exploratory factor analysis, confirmatory factor analysis using the maximum likelihood factor to test the goodness of fit was calculated. Due to the reasons described in
the previous section, we tested the two-factor model. In calculations, these two factors were permitted to correlate. Table 3 presents the standardised regression weights and model fit statistics for the model tested.

![Table 3](image)

The results indicate that the proposed two-factor model is adequate. Although chi-square is statistically significant ($\chi^2 = 307.39$, df= 151, $\chi^2$/df=2.036, p<0.001), other indices of model fit (the Root Mean Square Errors of Approximation [RMSEA] = 0.06; Comparative Fit Indexes [CFI] = 0.93; Tucker-Lewis Index [TLI] = 0.91) are reasonably satisfactory (they approach well fit), and they indicate that the model appears to find support. They comply with the criteria for adequate fit (López, Jódar, and MacDonald 2017, 1115); CFI is above the criterion (0.90 and above (Holmes-Smith 2011)), the RMSEA is below 0.08 (lower values indicate better fit, 0.08 is generally viewed as providing evidence of adequate fit, for a detailed discussion see Byrne (2010, 80–81)). The Tucker-Lewis Index produces a value above 0.90 and also indicates adequate fit.
The estimated correlation between the two factors (Horizontal and Vertical subscale) is moderate, namely 0.396, and is similar to results (0.39) in the study of Rived-Ocaña et al. (2020, 353).

### 3.3 Descriptive and Reliability Statistics of Si-RES

Means, standard deviations, minimums, maximums, and Cronbach alpha reliability coefficients for both determined Horizontal and Vertical subscales (along with total scale) of Si-RES were calculated and presented in Table 4. All Cronbach alpha coefficients reflect excellent reliability.

<table>
<thead>
<tr>
<th></th>
<th>M</th>
<th>Md</th>
<th>SD</th>
<th>Skewness</th>
<th>Kurtosis</th>
<th>Min.</th>
<th>Max.</th>
<th>Cronbach Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Si-RES Horizontal</td>
<td>36.33</td>
<td>38.00</td>
<td>8.00</td>
<td>-.452</td>
<td>-.663</td>
<td>14.00</td>
<td>50.00</td>
<td>0.884</td>
</tr>
<tr>
<td>Si-RES Vertical</td>
<td>37.55</td>
<td>38.00</td>
<td>5.28</td>
<td>-.833</td>
<td>.744</td>
<td>20.00</td>
<td>45.00</td>
<td>0.872</td>
</tr>
<tr>
<td>Si-RES Total</td>
<td>73.88</td>
<td>76.00</td>
<td>11.02</td>
<td>-.460</td>
<td>-.308</td>
<td>44.00</td>
<td>95.00</td>
<td>0.887</td>
</tr>
</tbody>
</table>

**Note:** N=271. M – arithmetic mean. Md – median. Min. – minimum. Max. – maximum. Si-RES Horizontal – Horizontal subscale of Slovene version of Relational Ethics Scale. Si-RES Vertical – Vertical subscale of Slovene version of Relational Ethics Scale. Si-RES Total – Total score of Slovene version of Relational Ethics scale.

**Table 4:** Descriptive and Reliability Statistics for the Si-RES subscales and Si-RES total score.

### 4. Discussion

In Slovenia, there is a lack of measures of relational ethics. In fact, we do not know of any that have been translated, adapted, and psychometrically evaluated to be used for research and other purposes. Therefore, our study evaluated one such scale: the Slovene language version of the Relational Ethics Scale (Si-RES) which measures relational ethics as conceptualised by Boszorményi-Nagy and Krasner (1986) and composed of perception of trust and justice, loyalty and entitlement.

The results of our study provide strong support for the psychometric properties of our adaptation of the Si-RES. We found excellent reliability (Cronbach alpha) of the Si-RES dimensions. Measures of reliability and also other psychometric characteristics (e.g., arithmetic means of dimensions) are mainly consistent with published research of the Relational Ethics Scale (Hargrave, Jennings, and Anderson 1991; Hargrave and Bomba 1993; Rived-Ocaña et al. 2020).

Furthermore, exploratory and confirmatory factor analysis gave supportive results and are, in general, especially consistent with the Spanish adaptation of the Relational Ethics Scale (Rived-Ocaña et al. 2020). There are two main differences from the original RES (Hargrave, Jennings, and Anderson 1991); namely, it has fewer items and a slightly different factorial structure. The factor solution, represented in Hargrave et al. (1991), has three separate factors (trust and justice, loyalty and entitlement) representing each horizontal and vertical dimension. However, similar to the Spanish adaptation, our results suggested a two-factor structu-
re, one factor representing the horizontal and the second factor the vertical dimension. Like the Spanish-speaking participants, the current Slovene-speaking sample in the study seems to perceive relational ethics more globally: in terms of horizontal and vertical relational ethics and not as three distinct subscales (trust and justice, loyalty, entitlement). This structure of Si-RES is both most theoretically meaningful and statistically confirmed.

There are different possible reasons for the discrepancy from the original version. Of course, cultural and semantic differences are possible. Slovene people’s perception of relationships ethics could be more similar to Spain’s than that of the United States. Another possible reason, as suggested in Rived-Ocaña et al. (2020, 355), is time differences. Three decades have passed since the original validation of the RES in 1991. Views on relationships, including relational ethics, in the original family, as well as in adult vertical relationships, could have changed substantially, and these differences could be reflected in our results, especially since the newer Spanish version in 2020 showed similar results. However, for firmer conclusions, more up-to-date validations in different cultural contexts are proposed.

Important is the notion of Rived-Ocaña et al. (2020): that Boszormenyi-Nagy himself focused on the horizontal and vertical dimensions of relational ethics rather than the subscales within each dimension (Adkins 2010). However, we also think that it is possible that perceptions and understanding of relationships ethics are now more similar to that position of the Boszormenyi-Nagy than it was in the time of the original version.

Regarding the fewer items of Si-RES in comparison with the original version, we stress that we removed the same three items that were removed in the Spanish version: item 15 (»When I feel hurt, I say or do hurtful things to this person«), item 19 (»When I feel angry, I tend to take it out on this person«) and item 13 (»I try to meet the emotional needs of this person«). In particular, the first two removed items (15 and 19) seem to measure one factor: specific aspects of adult relationships, different from other items of relational ethics, possibly more connected with expressions of anger and hurt, impulse control or emotional regulation. As previously discussed, cultural or time differences could be responsible for the discrepancy with the original version. In the Spanish version, items 2, 11, 17 and 22 were also removed, but this was not the case in the Slovene version. In the Slovene version, just item 5 (»No matter what happened, I always stood by my family«) and item 10 (»Individuals in my family were willing to give of themselves to benefit the family«) were statistically less appropriate for this Slovene sample and were removed from the final measure due to smaller communalities.

Although we find our sample of similar quality as, for example, the original evaluation studies of RES (Hargrave, Jennings, and Anderson 1991; Hargrave and Bomba 1993), we need to stress that a bigger sample could be more fully representative of the whole Slovene population and that this fact may have contributed to the limitation of this study. Therefore, future studies should be done with
larger and more diverse Slovene samples (other than married subjects are somewhat underrepresented in our sample) to possibly confirm and extend our results.

However, given the confirmative statistical results, theoretically meaningful factor solution, and similarity of the Slovene version with the Spanish one, we support using our translated version of the Si-RES as a promising instrument for research and other use in Slovenia.

**Abbreviation**

RES – Relational Ethics Scale.

**References**


Remington, Anna, Ula Cartwright-Finch and Nilli Lavie. 2014. I can see clearly now: The effects of age and perceptual load on inattentional blindness. _Frontiers in Human Neuroscience_ 8:1–11.

APPENDIX

The slovene-language version of the relational ethics scale (Si-RES):
1. Lahko sem zaupal svoji družini, da si je prizadeva za to, kar je bilo najboljše zame.
2. Posamezniki v naši družini so bili obtoženi za probleme, ki jih niso zakrivili.
3. Ugoditi enemu od mojih staršev je velikokrat pomenilo ne ugoditi drugemu.
4. Od svoje družine sem prejel ljubezen in naklonjenost, ki sta mi pripadali.
5. Včasih se je zdelo, da me vsaj eden od staršev ne mara.
6. Vsi družinski člani smo bili v enaki meri deležni ljubezni in topline.
7. Včasih me je družina nepošteno izkoristila.
8. Čutil sem, da so želje staršev obvladovale moje življenje.
9. Še naprej si prizadevam za tesnejše odnose z družino.
10. Pogosto sem se čutil zapuščenega od svoje družine.
11. Ne zaupam, da si ta oseba prizadeva za to, kar je najboljše zame.
12. Ta oseba mi stoji ob strani v težkih in veselih časih.
13. Preden sprejemem pomembne odločitve, to osebo vprašam za mnenje.
14. Najina vložka v odnos med mano in to osebo nista enakovredna.
15. V tem odnosu sva enakovredna partnerja.
16. Razdajava se drug za drugega.
17. To osebo izkoriščam.
18. V tem odnosu se me jemlje kot nekaj samoumevnega ali pa se me nepošteno izkorišča.
19. Ta oseba me posluša in ceni moje misli.